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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/915,622	07/26/2001	Mototsugu Abe	09792909-5145	6466

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EXAMINER	
CHEN, CHONGSHAN	
ART UNIT	**PAPER NUMBER**
2172	10

DATE MAILED: 05/06/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/915,622	ABE ET AL.	
	Examiner	Art Unit	
	Chongshan Chen	2172	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *04 March 2004*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments, see page 7, lines 1-3, filed on 4 March 2004, with respect to the rejection(s)of claim(s) 1 and 4-5 under 102(e) have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Chang et al. (6,298,343). Please see the detailed rejection below.

2. As per applicant's arguments regarding claim 3 and 6-8, "because the color groups in Tanaka are used to classify the colors constituting the image data, it would not be obvious to one of ordinary skill in the art at the time the invention was made to insert a digital watermark corresponding to the category in the information, as suggested by the Examiner", have been considered but are not persuasive. The examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988)and *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992). In this case, Tanaka discloses classifying the colors into color groups, and Sugahara discloses insert watermark into contents of information (Sugahara, col. 1, lines 63-67), and the watermark-embedded contents data are separated into groups (Sugahara, col. 9, lines 40-41). They are related to each other because both references classify the data into category. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert a digital watermark in the information and use the

digital watermark of Sugahara to classify the information in the system of Tanaka because watermark is preferably transparent, in the sense it would not interfere with the acquired information. Furthermore, it is preferably robust, in the sense that it is hard to remove or forge, and also is preferably detectable, in the sense that it should be easy to extract from the acquired information.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

3. Claims 1 and 4-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (6,519,360) in view of Chang et al. ("Chang", 6,298,343).

As per claim 1, Tanaka teaches an information providing apparatus comprising:

storage means for storing information, relevant information which is relevant to the information, and features of the information for each category of the information (Tanaka, Fig. 1, element 107, image database, Fig. 3 & 5A, col. 2, lines 10-20);

acquiring means for acquiring information to be searched for (Tanaka, Fig. 1, element 101, input section, 105, comparison and search controller);

determining means for determining a category to which the information acquired by said acquiring means belongs (Tanaka, col. 2, lines 13-17);

extracting means for extracting features of the information acquired by said acquiring means (Tanaka, Fig. 7, element 23, color feature extraction);

searching means for searching for the target relevant information stored in said storage means based on the result of the comparison performed by said comparing means (Tanaka, Fig. 1, element 105, comparison and search controller).

Tanaka does not explicitly disclose using the category to compare the features of the information with the features extracted by said extracting means. Chang discloses using the category to compare the features of the information with the features extracted by said extracting means (Chang, col. 1, line 59 – col. 2, line 34). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use category to compare the information in the system of Tanaka because using category in a search engine will narrow the search to its related area. It will result a more accurate search result in a shorter time.

Claims 4-5 are rejected on grounds corresponding to the reasons given above for claim 1.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (6,519,360) in view of Chang et al. ("Chang", 6,298,343) and further in view of Legh-Smith et al. ("Legh-Smith", 6,178,419).

As per claim 2, Tanaka and Chang teach all the claimed subject matters as discussed in claim 1, except for explicitly disclosing the category has a hierarchical structure. Legh-Smith teaches the category has a hierarchical structure (Legh-Smith, col. 1, lines 35-42). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to use a hierarchical structure for the category in the system of Tanaka and Chang because it is

easier to find information in a category directory since the choices are constrained by the known topic area categories.

5. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (6,519,360) in view of Chang et al. ("Chang", 6,298,343) and further in view of Sugahara et al. ("Sugahara", 6,636,617).

As per claim 3, Tanaka and Chang teach all the claimed subject matters as discussed in claim 1, except for explicitly disclosing determining the category based on a digital watermark, the digital watermark being inserted in the information acquired by said acquiring means. Sugahara teaches determining the category based on a digital watermark, the digital watermark being inserted in the information acquired by said acquiring means (Sugahara, col. 9, lines 40-43). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert a digital watermark in the information in the system of Tanaka because watermark is preferably transparent, in the sense it would not interfere with the acquired information. Furthermore, it is preferably robust, in the sense that it is hard to remove or forge, and also is preferably detectable, in the sense that it should be easy to extract from the acquired information.

6. Claims 6-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Tanaka (6,519,360) in view of Sugahara et al. ("Sugahara", 6,636,617).

As per claim 6, Tanaka teaches an information providing apparatus comprising:

acquiring means for acquiring information to be stored (Tanaka, Fig. 1, element 101);

determining means for determining a category to which the information acquired by said acquiring means belongs (Tanaka, col. 2, lines 21-38);

storage means for storing the information (Tanaka, Fig. 1, element 107, Fig. 2); and

delivery means for delivering the information stored in said storage means via a network (Tanaka, Fig. 2, element 2 & 7).

Tanaka does not explicitly disclose inserting means for inserting a digital watermark in the information acquired by said acquiring means, the digital watermark corresponding to the category determined by said determining means. Sugahara teaches inserting a digital watermark in the acquired information (Sugahara, col. 1, lines 63-67). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to insert a digital watermark in the information in the system of Tanaka because watermark is preferably transparent, in the sense it would not interfere with the acquired information. Furthermore, it is preferably robust, in the sense that it is hard to remove or forge, and also is preferably detectable, in the sense that it should be easy to extract from the acquired information.

Claims 7-8 are rejected on grounds corresponding to the reasons given above for claim 6.

Conclusion

7. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Contact Information

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chongshan Chen whose telephone number is 703-305-8319. The examiner can normally be reached on Monday - Friday (8:00 am - 4:30 pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John E Breene can be reached on (703)305-9790. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

April 26, 2004

SHAHID ALAM
PRIMARY EXAMINER